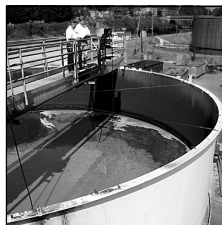


Industrial Pretreatment Quarterly

Published for Industrial Dischargers by the King County Industrial Waste Program (KCIW)



King County
Wastewater Treatment Division
Industrial Waste Program

Volume XXXII Issue 2 June 2005

Mission Statement

The mission of the Industrial Waste Program is to protect the environment, public health, biosolids quality, and King County's regional sewerage system. We work cooperatively with our customers as we regulate industrial discharges, provide technical assistance, and monitor the regional sewerage system.

Industrial Waste Advisory Committee

Kevin Burrell,
Environmental Coalition of South
Seattle (ECOSS)
Ken Gross, GM Nameplate
Sandy Hallberg, Asko Processing
Donna Hoskins, Berlex Laboratories
Bill Hughes, Skills, Inc.
Mike Jeffers, Rebec LLC
Tom Raymond, Honeywell, Inc.
Steve Skodje, Cargill, Inc.
Doris Turner, Boeing Commercial
Airplane Group - Renton
Chris VanHoof, City of Kent
Scott Woerman, North Creek Analytical

2004 Rewards and Recognition Program

(Awarded in 2005 and listed here throughout that year)

Commitment-to-Compliance Award

B.S.B. Diversified Co.
Boeing Electronics Center
Smith Fabrication Inc.
Vectra Fitness Inc.

EnvirOvation Award Winners Announced

In April the King County Industrial Waste Program (KCIW) announced its 2004 EnvirOvation Award winners – Ball Metal Beverage Container Corp. and Exotic Metals Forming Co., both of Kent. (See our September newsletter for an article about Exotic Metals Forming Co.)

KCIW's EnvirOvation Award is given to companies with wastewater discharge permits that have: voluntarily implemented an innovative pollution prevention strategy; significantly updated their pretreatment equipment or methods; significantly reduced the amount of wastes being discharged to King

County sewers, or significantly reduced their water use.

Ball Metal demonstrated excellence in water use reduction. The 175,000-square-foot plant has high-speed lines producing aluminum beverage cans and ends. The plant had been adding fresh water during each of the washer's rinsing stages when cleaning the cans. By utilizing the same water from stage to stage in a counterflow technology, staff reduced water usage by 46 percent.

The improved process also reduced quantities of other material used. Since lower



Ball Metal winners l. to r.: Wayne Moore, Plant Manager; (Elsie Hulsizer, KCIW Program Manager); Tom Lusk, Chemical Process Technician; Rich Davies, Shop Technician; Brent McElhinney, D&I Technician.

Inside this Issue

- KCIW EnvirOvation awards
- KCIW News: Local sewer agency workshop; Next IWAC meeting; Stormwater Manual
- Industrial Pretreatment Tips: Definitions
- Honeywell wins Green Globe
- IWAC meeting summary
- Recent enforcement actions

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KCIW News Briefs

Save the date for KCIW's local sewer agency workshop!

KCIW invites all interested parties to attend a workshop for local sewer agencies with optional tour of West Point Treatment Plant on Wednesday, September 28 from 8:30 a.m. - 12:30 p.m. We welcome your input on topics or speakers. (Note: this is not our general workshop for significant industrial users, which normally takes place every other year.)

KCIW will send further details and registration forms to our contact persons at each sewer agency this summer, and will provide additional information in the September edition of this newsletter.

For further information or with comments, call Dana West at 206.263.3018 or email dana.west@metrokc.gov.

The next Industrial Waste Advisory Committee meeting will take place November 2

Agenda to be determined. (See summary of the May meeting on page 7.)

Updated Stormwater Management Manual for Western Washington

The Department of Ecology has published an update to the Stormwater Management Manual for Western Washington. The revised version applies recent research, updates design criteria and procedures, corrects errors and clarifies statements from the previous release.

The updated manual offers new tools and choices to manage stormwater runoff in new residential and commercial developments, at industrial and construction sites, and in urban areas.

Storm water is a major contributor to pollution in Puget Sound. Stormwater runoff becomes a problem when rain and snow sweep dirt, bacteria, chemicals and other contaminants into streams, lakes, estuaries and underground water and makes the waters unhealthy for drinking, swimming, boating. Uncontrolled stormwater runoff also erodes stream channels and destroys salmon habitat.

For more information go to: <http://www.ecy.wa.gov/programs/wq/stormwater/manual.html> on the Internet.

Gold Award

A.O. Smith Water Products Co.
Aero Controls Inc. - 20th Street NW
Alaskan Copper Works - 6th Ave.
Amgen Corp. - Bothell
Asko Processing Inc.
Avtech Corp.
B.S.B. Diversified Co.
Baker Commodities Inc.
Ball Metal Beverage Container Corp.
Berlex Laboratories (Washington) LLC -
Bothell
Boeing Commercial Airplane - North Field
Boeing Commercial Airplane - Renton
Boeing Electronics Center
BP-Arco Petroleum
Burlington Northern/Santa Fe Railway
Carnitech US Inc.
Crane-Eldec Corp. - North Creek Facility
Exotic Metals Forming Co.
Genie Industries - Bldgs. 3 & 4
Glacier Northwest Inc. - Kenmore
Hytek Finishes Co.
I-90 Express Finishing
Industrial Container Services Inc.
Interstate Brands Corp. - Hostess
Island Spring Inc.
Kenworth Truck Company - Renton
Magnetic And Penetrant Services Co.
Mastercraft Metal Finishing Inc.
Mikron Industries
Oberto Sausage Co. - Airport Way
Pacific Iron & Metal
Pacific Rendering Co.
Pepsi-Cola Co.
Pioneer Industries
Protective Coatings Inc.
Quality Finishing Inc.
Redhook Brewing Co.
Rexam Beverage Can Co.
Safeway Inc. - Beverage Plant
Seattle Solid Waste - Kent Highlands
Landfill
Shasta Beverage
Skills Inc.
Smith Fabrication Inc.
Stockpot Inc.
Tri-Way Industries Inc.
Universal Manufacturing

Universal Sheet Metal Inc.
Vectra Fitness Inc.
Western Pneumatic Tube
Western Processing Trust Fund II
Weyerhaeuser Co.

Silver Award

Acu-Line Corp.
Aerojet-General Corp.
Art Brass Plating, Inc
Carl Zapffe Inc.
Cedar Grove Composting Inc.
Circuit Services WorldWide
Costco Wholesale
Crane-Eldec Corp. - Martha Lake Facility
Dawn Food Products Inc.
Emerald Services, LLC
GKN Aerospace Chem-tronics Inc.
GM Nameplate Inc.
Honeywell International Inc.
Industrial Plating Corp.
Kerry Inc.
King County Solid Waste - Cedar Hills
Landfill
Marco Shipyard Seattle Inc.
Northstar Beverage Co.
Oberto Sausage Co. - Kent
Pacific Propeller International, LLC
Philip Environmental Services Corp.
Puget Sound Energy Inc.
Rabanco Recycling Co.
TTM Technologies Inc.
Universal Brass Inc.

Every year, King County recognizes significant industrial users of the sewer system that have maintained an excellent record of compliance with the county's industrial waste discharge regulations for the previous calendar year. For awards criteria and more information, go to <http://dnr.metrokc.gov/wlr/indwaste/Awards.htm> on the Web.

King County's industrial pretreatment regulations are designed to prevent businesses from discharging substances that can degrade the wastewater treatment process, harm workers, damage facilities or reduce surface-water quality.

Industrial Pretreatment Tips

Definition of terms you may regularly encounter

In wastewater treatment and pollution control we use terms that are occasionally unique to this field, and sometimes the meanings are not readily obvious. Understanding the correct definition could be the determining factor of whether or not a company is in full compliance with regulations. KCIW is presenting a series of articles on what we believe are the most important, and sometimes least understood terms. All of the terms addressed are in Chapter 28.82-Definitions of the King County Code.

Significant Noncompliance

In July 1990 the U. S. Environmental Protection Agency (EPA) promulgated the following definition for Significant Noncompliance (SNC):

"Significant Noncompliance" shall apply to an industrial user if its violation(s) meets one or more of the following criteria:

- a. Chronic violations of wastewater discharge limits, defined here as those in which 66 percent or more of all of the measurements taken during a six-month period exceed - by any magnitude - the daily maximum limit or average limit for the same pollutant parameter;
- b. Technical Review Criteria (TRC) violations, defined here as those in which 33 percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease and 1.2 for all other pollutants except pH);
- c. Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the control authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);
- d. Any discharge of a pollutant that has caused imminent danger to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under this chapter to halt or prevent such a discharge;
- e. Failure to meet, within 90 days after the scheduled date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
- f. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports and reports on compliance with compliance schedules;
- g. Failure to accurately report noncompliance; and

continued on page 4

volumes of lime were required, Ball Metal decreased the amount of lime sludge sent to the landfill by 50 tons in 2004. Certain chemicals also showed a decrease, including an over 50 percent reduction in sulfuric acid.

The Ball Metal plant has also recently worked with the Washington State Department of Ecology's (Ecology's) Technical Resources for Engineering Efficiency (TREE) Team. (Tree is made up of Ecology engineers and scientists who use their expertise in industrial processes and pollution prevention to improve a facility's efficiency.) Ball was also a finalist for the 2002 Governor's Award for Pollution Prevention and Sustainable Practices.

Congratulations, Ball Metal!

KCIW's awards program supports the goals of King County's industrial waste regulations: to protect public health and the environment by preventing businesses from discharging substances that can degrade wastewater treatment, harm workers, damage facilities or reduce surface-water quality. For more information about the awards program, see Internet and phone contact information on page 1.

(Definition of Terms continued from page 3)

h. Any other violation or group of violations that the control authority determines will adversely affect the operation or implementation of the local pretreatment program."

The revised General Pretreatment Regulations (40 CFR Part 403) included, along with the new SNC criteria, public participation requirements. These included, at a minimum, annual publication in the largest daily newspaper of all industrial users that violate SNC criteria.

The December 1990 edition of this newsletter announced the new SNC definition and requested comments on a proposed publication policy that would allow KCIW to meet the new EPA requirements.

The March 1991 edition of this newsletter announced this publication policy. KCIW would publish: names of all companies that the program

found to meet any of the SNC criteria; names of all companies with fines; and names of all companies that have had violations that are unique in nature and thus warrant special attention.

In the 14 years since establishment of the policy the most frequently violated SNC criteria has been the failure to file a report within 30 days of the due date (subparagraph f.). Ironically this is also the easiest SNC criterion for companies to avoid violating - simply by notifying KCIW if it appears that a report is going to be late, and requesting an extension.

"BOD"

A frequently encountered term in pollution control is "BOD", which stands for "Biochemical Oxygen Demand."

"The Code states: Biochemical Oxygen Demand" or "BOD" shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter (as described in American Public Health Association publication Standard Methods For The Examination Of Water And Wastewaters, current edition, or Guidelines Establishing Test Procedures For The Analysis Of Pollutants, contained in 40 CFR Part 136) in five days at temperature of 20 degrees centigrade, expressed in milligrams per liter."

Simply, BOD is a measure of how much oxygen is used by microorganisms to break down organic matter in wastewater. This measurement is important because 61 companies in the King County area are paying the BOD charge.

This high strength surcharge started in January 1977 as result of federal requirements. King County (then Metro) designed the charge to ensure that commercial and industrial operations pay for any wastewater that has a BOD greater than normal sewage. Based on studies, King County defined that normal sewage has a BOD of 300 milligrams per liter (mg/l) - thus the surcharge is applicable to discharges containing a BOD in excess of that amount.

Suspended Solids

Suspended solids (SS) are also subject to a surcharge when in excess of normal sewage. They are also referred to as total suspended solids (TSS). The Code states:

“Suspended Solids” shall mean total suspended matter that either floats on the surface of, or is in suspension in, water or wastewater and is removable by laboratory filtering as described in Standard Methods For The Examination of Water and Wastewaters, current edition, or Guidelines Establishing Test Procedures For The Analysis of Pollutants, contained in 40 CFR Part 136, as published in the Federal Register, and referred to as nonfilterable residue.”

The waste strength of normal sewage for TSS is set at 400 mg/l. Presently 44 companies in the King County area are paying a surcharge for TSS.

Surcharge billing is based on the average waste strengths assigned to a company for BOD and/or TSS. Average waste strength is normally determined by direct measurement, however KCIW will also accept self-monitoring data as long as appropriate monitoring and analytical protocols have been followed. In instances where self-monitoring data is used, our program averages it with our data.

Each November KCIW notifies all companies subject to the surcharge what their assigned waste strength will be for the following year. They are provided with a 15 calendar-day period to file an appeal of their assigned waste strength.

Surcharge billing then occurs on a monthly basis.

An assigned strength is usually applicable for the entire year. However if a company revises waste disposal practices, installs pretreatment or otherwise takes steps that permanently alter (reduce) the waste strength, KCIW will revise it. If KCIW confirms the waste strength reduction by monitoring, the new waste strength will be effective on the date that the altered conditions occurred.

(Please keep in mind that the installation of any pretreatment equipment should be approved KCIW's engineer.)

For further information, contact KCIW's Doug Hilderbrand at 206.263.3032 or email: douglas.hilderbrand@metrokc.gov

This information is available on advance request in accessible formats for persons with disabilities.

Please call 206-263-3000 or TTY relay service at 1-800-833-6388.

King County awards Green Globes

On April 22 Honeywell International of Redmond received the Green Globes Leader in Industrial Waste Reduction Award. King County's most prestigious environmental awards, the Green Globes honor businesses, organizations and individuals who have participated in one or more Department of Natural Resources and Parks programs.

As KCIW's 2003 EnvirOvation Award winner, Honeywell became eligible to win the award for its efforts to voluntarily implement innovative pollution prevention strategies, by significantly updating its pretreatment equipment and methods. The company is also protecting our environment through a culture of environmental stewardship it promotes, including significant efforts in recycling.

King County honored 14 Green Globe recipients for environmental achievements. Along with Honeywell awardees included, among others: William Ruckelshaus, the nation's first director of the U. S. Environmental Protection Agency; biosolids specialists Dr. Sally Brown and Dr. Chuck Henry of the University of Washington; and YK Products of Everett.

King County Executive Ron Sims presented the awards in a ceremony hosted by KIRO-TV's Penny LeGate and held at Westlake Park surrounded by Earth Day Expo activities.



King County Executive Ron Sims presents Green Globe award to Honeywell's Shaila Nyborg, Environmental Technician.

KCIW May IWAC meeting summary

With the goal of protecting the environment, public health, biosolids quality and King County's regional sewerage system, KCIW's Industrial Waste Advisory Committee (IWAC) meets to exchange ideas among representatives of industrial wastewater dischargers, sewer agencies, environmental groups, and KCIW staff.

1. Announcements:

Copies of the Executive Summary portion of the King County 2004 Annual Pretreatment Report were given to IWAC members. If interested, copies are available by contacting KCIW's Kristin Painter at 206-263-3002 or email: kristin.painter@metrokc.gov.

2. Seattle Biodiesel:

John Plaza, president and founder of Seattle Biodiesel, spoke about his new company and the production and use of biodiesel as an alternative to petroleum-based diesel fuel. Biodiesel is a clean-burning, non-toxic fuel made mostly from renewable resources such as soybeans, canola oil, and mustard seed. It contains no petroleum, but can be blended at any level with petroleum diesel to create a biodiesel blend. It is better for the environment because it is made from renewable resources and has lower emissions compared to petroleum diesel.

The Seattle area probably has one of the highest concentrations of people who run biodiesel in their personal cars, and Washington is one of the top states in biodiesel usage, mainly by government fleets. The company plans to serve both public and private fleets with locally produced biodiesel using existing networks of fuel distributors. *For more information about Seattle Biodiesel, please e-mail: john@seattlebiodiesel.com.*

3. FOG – Fats, Oils, and Grease:

Bruce Tiffany, Water Quality Engineer for King County Industrial Waste (KCIW), gave a presentation about fats, oils, and grease (FOG) and how KCIW regulates FOG dischargers. FOG can block sewer lines and is one of the major causes of sanitary sewer overflows (SSOs). KCIW regulates food processors such as dairies, fish processors, bakeries, meat processors, ice cream manufacturers, etc. Local sewer agencies regulate restaurants, cafeterias, and residences. King County rules require discharg-

ers to minimize free-floating FOG. Wastewater must not be discharged if someone can see FOG floating on the surface or adhering to the sides of storage containers. Dischargers may not add agents to emulsify free-floating polar FOG. King County may require companies discharging polar FOG to complete a FOG control plan. The goal of the FOG control plan is to implement reasonable and technically feasible controls of free-floating FOG. *For more information about the KCIW FOG Program, please contact Bruce Tiffany at 206-263-3011 or email: bruce.tiffany@metrokc.gov.*

4. Industrial Waste's Biotechnology Project:

Each year KCIW targets an industry sector to research. Arnaud Girard, KCIW Compliance Investigator, discussed this year's focus on the area's biotechnology industry researching questions such as:

- What type and size of biotechnology companies are out there? What are they doing?
- Does KCIW need to spend more time regulating the biotechnology industry sector?
- What type of permitting instrument is needed to regulate them?

The team will be sending out a survey to 150 biotech companies. *For more information about this project, contact Arnaud Girard at 206-263-3012 or email: arnaud.girard@metrokc.gov.*

5. Industrial Waste's Strategic Planning:

Elsie Hulsizer, Industrial Waste Program Manager, talked about the strategic planning process that KCIW is working on through 2005. Goals are to save on fees, have a lean operation, be an effective pretreatment program, and be prepared to respond to changes in the economy and in our own government system. *For more information about the KCIW strategic planning process, please contact Elsie Hulsizer at 206-263-3010 or elsie.hulsizer@metrokc.gov.*

6. Tour of GM Nameplate Facility:

Ken Gross gave a tour of the GM Nameplate Facility. Thanks for the hospitality shown by Ken and GM Nameplate in hosting this meeting!

For complete summary notes see contact information page 1. The next meeting will be at 9:00 a.m., November 2, 2005.

Publication of recent enforcement actions

King County's Industrial Waste Program is responsible for making sure that water used by county industries returns to our waterways clean and safe. This protects our water resources, our public health, workers at treatment plants, and the biosolids produced there.

The vast majority of King County's businesses do an excellent job of meeting these clean water goals by treating their industrial wastewater before they discharge it to the sewer. Whenever possible, we work to provide technical assistance and help industries reach compliance before enforcement actions become necessary. If companies violate clean water standards, however, we do take enforcement actions, as federal regulations require.

The following companies are users of the county sewer system that violated treatment requirements between March 2005 and May 2005 (or have not had their violations previously published) and either:

- were found in significant noncompliance during the reporting period; and/or
- received fines, and/or
- had violations that were unique or warranted special attention.

Puget Sound Recycling

523 A Street SE

Auburn, Washington 98002

Nature of Violation/ Type of Pollutant: Discharge violation-between September 2004 and February 2005, five out of six months the lead concentrations reported for self-monitoring data violated the maximum monthly average limit.

Basis for Publication: Puget Sound Recycling exceeded the chronic criteria, that is, during a six-month period at least 66 percent or more of the measurements for lead exceeded (by any magnitude) the maximum monthly average limit.

Comments: Puget Sound Recycling has reviewed its treatment process and taken steps to stabilize the wastewater pH before it enters the facility's dissolved air floatation (DAF) treatment system.

Penalty: \$1,325 post-violation charge and compliance order.

WestFarm Foods (Dairgold)-Issaquah

611 Front Street

Issaquah, Washington 98027

Nature of Violation/ Type of Pollutant: Permit violation-discharge of material that will cause an obstruction.

Basis for Publication: Had a violation that warranted a fine.

Comments: WestFarm Foods (Dairgold)-Issaquah has hired an engineering firm to submit plans to King County for construction and installation of a grease interceptor for this facility.

Penalty: \$2,875 fine and \$1,475 post-violation charge.

Other Enforcement Actions King County Industrial Waste also acted on 11 other violations at nine companies for the following pollutants and/or parameters: late reports (1); cadmium (1); chrome (1); copper (1); lead (2); permit violation-unauthorized change in pretreatment system (1); pH-acidic (1); silver (1); zinc (2).

We all need to work together to prevent pollution. If you have information for the Industrial Waste Program or questions about our programs, please call 206-263-3032 or 711, TTY Relay Service. You may also visit our program's pages at <http://dnr.metrokc.gov/wlr/indwaste/> on the Internet.



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Seattle, WA 98109-1658

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King County's Wastewater Treatment Division protects public health and water quality by serving 17 cities, 16 sewer districts and more than 1.4 million residents in King, Snohomish and Pierce counties. The regional public utility has been preventing water pollution for nearly 40 years.



The May Industrial Waste Advisory Committee (IWAC) meeting was held at GM Nameplate's corporate headquarters in Seattle. GM Nameplate is a multi-national manufacturer of custom product identification components, electronic input devices, injection and compression molding and large format digitally printed graphics. On the right, Marketing Manager Melissa Sherrard shows IWAC members through the facility.

Clean Water: A Sound Investment